

PULSA BOSTON DEMONSTRATION REPORT, OCTOBER 8 TO 27, 1968

The intention of the Pulsa Boston show was to present an experimental demonstration of public environmental art on a large scale to an urban population. In downtown Boston's Public Garden, fifty-five xenon strobes were placed underwater in the four-acre pond, and fifty-five poly-planar speakers were placed above water around the pond's perimeter. These output devices were programmed differently each night using elements of analog and digital computer, a punch-paper tape reader, a signal synthesizer, and magnetic tape.

The Pulsa environment was specifically designed to provide a situation of organized light and sound activity. A city such as Boston consists of a vast complex of energized, moving phenomena contained in a static grid of routes and structures. At night in particular, the fixed nature of the environment, its monolithic buildings and rigid roadways, both illuminated almost entirely by unchanging point-source lighting, contrast sharply with the ceaseless flow of lights and sounds through the city. "T.V., films, the complex interplay of urban sounds and lights, and experiences such as driving on highways at night through darting streams of automobile headlights, have involved our culture in areas of new perception. The Boston show, literally consisting of high-speed pattern change, multiplexing, and audio-visual non-synchrony makes meaningful and pleasurable these experiences which are constantly present in our daily lives." Pulsa Pres

Release). The purpose of the Pulsa environment was to integrate new technological activities which characterize the functioning of the city with the city's physical structure.

As an experiment in this new area of urban environment, the Pulsa show was a marked success. Running for twenty consecutive nights, the show was viewed at length by thousands of the city's inhabitants, most of whom came without interruption of their daily activities en route through the park and paused to examine the unique phenomena displayed there. The interviews conducted by a Signs/Lights analyst indicate the nature of their personal responses. More important, however, than their feelings about what they saw and heard is the fact that they were exposed to a new kind of experience which has opened up a new expectation from their surroundings.

For both ourselves and Signs/Lights the Pulsa demonstration was a meaningful learning experience. Each of the twenty different programs was evolved from conclusions reached during the previous night's presentation. Extending this exploration beyond the framework of the Boston show, we are now examining other deployments of the materials from Boston in a non-urban winter landscape in association with new programming concepts and techniques.

Aside from experimental purposes the Boston show was the first public art work to embody an installation scale and systems approach that reflect and relate the kind of scale and systems that are beginning to appear in cities to-

day. The success of the demonstration lay in Pula's conviction that public art must treat all parameters of the urban and technological environment as potential media for artistic expression in order to introduce these concepts on a large scale into the cities of the future.

Pursuing further the ideas which led to the Boston show, we are interested in designing and programming new kinds of non-static urban lighting and sound. This intent pertains not just to aesthetics but also to orientation through illumination, organized sound, information display, and other means. We want to collaborate with architects, park designers, highway engineers and city planners. The entire human environment is increasingly in the hands of these individuals, and it is therefore critical that they be supplied with ideas based on research into the aesthetic effects of perceptible energy within specific environments.

Our notion of collaboration with planners of new environments would involve a systemic approach to the total entity being designed. Our intention would be to program the various sub-systems which comprise the vital skeleton of the designed entity in such a way as to emphasize its non-static, interactive nature. Traditionally, architects have provided reliquaries within completed designs for imposition of totalitarian objects by artists. A new attitude can only be effectively realized by a totally new collaboration entailing interactive exchange between groups of designers and artists from the first stages of planning. We hope to evolve new

forms of living experience which are based on the knowledge that the structures within which man functions should not be fortresses which exclude the external world, that in fact they are the interacting systems through which his life is made possible. These new environmental systems would focus awareness both within and outside the actual structures by utilizing information from natural forces of the external world such as atmospheric and planetary occurrences on a day to day and seasonal basis. This information would be dynamically related to the functioning of systems for light, sound, water, heat, traffic flow, communication, maintenance, information, entertainment, art, associated electronics, etc., through computer technology.

Recent progress in computer hardware and programming indicates that during the next ten years artificial intelligence in the form of computer subsystems will become an integral part of buildings, highways, cities, schools, and even homes. The first task of such intelligent sub-systems will be the regulation of such mundane functions as traffic, heat, light, plumbing and food. These activities will be controlled initially by simple fixed programming techniques modified by human intervention in response to changes in larger environmental contexts, and in uses of living and working spaces. As intelligent sub-systems become more sensitive to larger environmental contexts, and the deeper subtleties of human needs, that is, as they become more intelligent, they will

begin a dialogue with the natural and human environments with which they function. Living and working spaces will then become organic entities that will change as humans and the natural environment evolve. Artists will be involved in the conception of such living and working spaces by making the systematic intelligent behavior of such environments abstractly manifest to people interacting with them. This integration of systems underlying the human environment would imply not only new kinds of aesthetic involvement with the new intelligent architecture, highways, and cities, but also a new unification and knowingness for human existence.